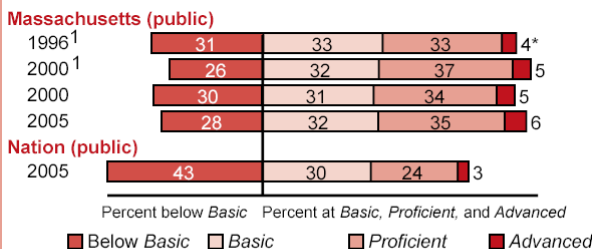


The National Assessment of Educational Progress (NAEP) assesses science in two major dimensions: Fields of Science (Earth, Physical, and Life) and Knowing and Doing Science (Conceptual Understanding, Scientific Investigation, and Practical Reasoning). The NAEP science scale ranges from 0 to 300. Scales are created separately for each grade.

Overall Science Results for Massachusetts

- In 2005, the average scale score for eighth-grade students in Massachusetts was 161. This was higher than their average score in 2000 (158), and was higher than their average score in 1996 (157).¹
- Massachusetts' average score (161) in 2005 was higher than that of the nation's public schools (147).
- Of the 44 states and one jurisdiction that participated in the 2005 eighth-grade assessment, students' average scale score in Massachusetts was higher than those in 35 jurisdictions, not significantly different from those in 8 jurisdictions, and lower than that in 1 jurisdiction.²
- The percentage of students in Massachusetts who performed at or above the NAEP *Proficient* level was 41 percent in 2005. This percentage was not significantly different from that in 2000 (39 percent), and was not significantly different from that in 1996 (37 percent).
- The percentage of students in Massachusetts who performed at or above the NAEP *Basic* level was 72 percent in 2005. This percentage was not significantly different from that in 2000 (70 percent), and was not significantly different from that in 1996 (69 percent).

Student Percentages at NAEP Achievement Levels



¹ Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 science achievement levels correspond to the following scale points: Below Basic, 142 or lower; Basic, 143–169; Proficient, 170–207; Advanced, 208 or above.

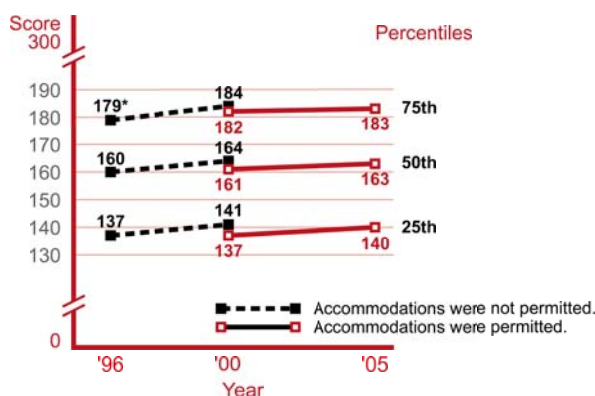
Performance of NAEP Reporting Groups in Massachusetts: 2005

Reporting groups	Percent of students	Average score	Percent below Basic	Percent of students at or above Basic	Percent Proficient	Percent Advanced
Male	52	162	27	73	42	6
Female	48	160	28	72	39	5
White	75	168↑	19	81	48	7
Black	9	133	63	37	10	1
Hispanic	10	133↑	63	37	9	#
Asian/Pacific Islander	5	166	25	75	45	11
American Indian/Alaska Native	#	‡	‡	‡	‡	‡
Eligible for free/reduced-price school lunch	28↑	142↑	50	50	18	1
Not eligible for free/reduced-price school lunch	70	168	19	81	49	8

Average Score Gaps Between Selected Groups

- In 2005, male students in Massachusetts had an average score that was not significantly different from that of female students. In 1996, the average score for male students was higher than that of female students by 5 points.
- In 2005, Black students had an average score that was lower than that of White students by 35 points. In 1996, the average score for Black students was lower than that of White students by 37 points.
- In 2005, Hispanic students had an average score that was lower than that of White students by 35 points. In 1996, the average score for Hispanic students was lower than that of White students by 39 points.
- In 2005, students who were eligible for free/reduced-price school lunch, an indicator of poverty, had an average score that was lower than that of students who were not eligible for free/reduced-price school lunch by 26 points. In 1996, the average score for students who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 31 points.
- In 2005, the score gap between students at the 75th percentile and students at the 25th percentile was 43 points. In 1996, the score gap between students at the 75th percentile and students at the 25th percentile was 42 points.

Science Scale Scores at Selected Percentiles



Scores at selected percentiles on the NAEP science scale indicate how well students at lower, middle, and higher levels performed.

The estimate rounds to zero.

‡ Reporting standards not met.

* Significantly different from 2005.

↑ Significantly higher than 2000. ↓ Significantly lower than 2000.

¹ Comparisons (higher/lower/not different) are based on statistical tests. The .05 level was used for testing statistical significance. Comparisons across jurisdictions and comparisons with the nation or within a jurisdiction across years may be affected by differences in exclusion rates for students with disabilities (SD) and English language learners (ELL). The exclusion rates for SD and ELL in Massachusetts were 3 percent and 1 percent in 2005, respectively. Statistical comparisons are calculated on the basis of unrounded scale scores or percentages.

² "Jurisdiction" refers to states and the Department of Defense Education Activity schools.

NOTE: Detail may not sum to totals because of rounding and because the "Information not available" category for free/reduced-price school lunch and the "Unclassified" category for race/ethnicity are not displayed. Visit <http://nces.ed.gov/nationsreportcard/states/> for additional results and detailed information.

